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Amendments to the specification are indicated in the attached "Marked Up Version of Amendments" (pages i - ii).

In the Claims

Please amend claim 25 as follows. Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages iii - iv).

25. (Amended) A kit for performing a method of assaying for the activity of a signal transduction pathway in a mammalian cell, said method comprising the steps of:

detecting in a signal transduction pathway-specific reporter cell line expression of a reporter gene, wherein said reporter cell line comprises:

a reporter gene operably linked to a recognition sequence for a sequence-specific DNA-binding protein; and

a stably integrated recombinant nucleic acid construct comprising a sequence encoding a fusion protein, said fusion protein comprising:

a sequence-specific DNA binding domain, wherein said DNA binding domain specifically binds said recognition sequence; and

a conditionally active transactivation domain;

wherein activation of said conditionally active transactivation domain is dependent on protein phosphorylation and/or protein:protein interaction, wherein binding of said fusion protein to said recognition sequence results in transactivation of said reporter gene when said transactivation domain fused to said DNA binding domain is activated, wherein expression of said reporter gene is indicative of activity of said signal transduction pathway;

said kit comprising a cell line comprising a stably integrated recombinant nucleic acid construct comprising:



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a reporter gene operably linked to a recognition sequence for a sequence-specific DNA-binding protein; and

a stably integrated recombinant nucleic acid construct comprising a sequence encoding a fusion protein, said fusion protein comprising a sequence-specific DNA binding domain, wherein said DNA binding domain specifically binds said recognition sequence, and a conditionally active transactivation domain, wherein activation of said conditionally active transactivation domain is dependent on protein phosphorylation and/or protein:protein interaction, and wherein binding of said fusion protein to said recognition sequence results in transactivation of said reporter gene when said transactivation domain fused' to said DNA binding domain is activated.

Please add new claims 27-32 as follows.

(New) A kit for performing a method of screening for a modulator of the activation of a signal transduction pathway in a mammalian cell, said method comprising the steps of:

(a) contacting a stable reporter cell line with a candidate modulator under conditions sufficient to permit activation of said signal transduction pathway, the reporter cell line comprising:

a reporter gene operably linked to a recognition sequence for a sequence-specific DNA-binding protein; and

a stably integrated recombinant nucleic acid construct comprising a sequence encoding a fusion protein, said fusion protein comprising a sequence-specific DNA binding domain, wherein said DNA binding domain specifically binds said recognition sequence, and a conditionally active transactivation domain, wherein activation of said conditionally active transactivation domain is dependent on protein phosphorylation and/or protein:protein interaction, wherein binding of said fusion protein to said recognition sequence results in

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transactivation of said reporter gene when said transactivation domain fused to said DNA binding domain is activated; and

(b) detecting expression of said reporter gene, wherein a difference in expression of said reporter gene in the presence of said candidate modulator and in the absence of said candidate modulator is indicative of modulatory activity of said candidate modulator on said pathway;

said kit comprising a cell line comprising a stably integrated recombinant nucleic acid construct comprising:

a reporter gene operably linked to a recognition sequence for a sequence-specific DNA-binding protein; and

a stably integrated recombinant nucleic acid construct comprising a sequence encoding a fusion protein, said fusion protein comprising a sequence-specific DNA binding domain, wherein said DNA binding domain specifically binds said recognition sequence, and a conditionally active transactivation domain, wherein activation of said conditionally active transactivation domain is dependent on protein phosphorylation and/or protein:protein interaction, and wherein binding of said fusion protein to said recognition sequence results in transactivation of said reporter gene when said transactivation domain fused to said DNA binding domain is activated.

(New) The kit of claim 27, said kit further comprising a nucleic acid expression construct encoding an upstream activator of the conditionally active transactivation domain.

(New) A kit for performing a method of assaying for the activation of a conditionally active transactivation domain in a mammalian cell, said method comprising the steps of:

detecting in a stable reporter cell line that is subjected to conditions which permit activation of the conditionally active transactivation domain the expression of a reporter gene, the reporter cell line comprising:

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a reporter gene operably linked to a recognition sequence for a sequence-specific DNA-binding protein; and

a stably integrated recombinant nucleic acid construct comprising a sequence encoding a fusion protein, said fusion protein comprising a sequence-specific DNA binding domain, wherein said DNA binding domain specifically binds said recognition sequence, and a conditionally active transactivation domain, wherein activation of said conditionally active transactivation domain is dependent on protein phosphorylation and/or protein:protein interaction, wherein binding of said fusion protein to said recognition sequence results in transactivation of said reporter gene when said transactivation domain fused to said DNA binding domain is activated; and wherein expression of said reporter gene is indicative of the activity of said conditionally active transactivating protein;

said kit comprising a cell line comprising a stably integrated recombinant nucleic acid construct comprising:

a reporter gene operably linked to a recognition sequence for a sequence-specific DNA-binding protein; and

a stably integrated recombinant nucleic acid construct comprising a sequence encoding a fusion protein, said fusion protein comprising a sequence-specific DNA binding domain, wherein said DNA binding domain specifically binds said recognition sequence, and a conditionally active transactivation domain, wherein activation of said conditionally active transactivation domain is dependent on protein phosphorylation and/or protein:protein interaction, and wherein binding of said fusion protein to said recognition sequence results in transactivation of said reporter gene when said transactivation domain fused to said DNA binding domain is activated.

(New) The kit of claim 25, said kit further comprising a nucleic acid expression construct encoding an upstream activator of the conditionally active transactivation domain.



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(New) A kit for performing a method of screening for a modulator of the activity of a conditionally active transactivation domain in a mammalian cell, said method comprising the steps of:

(a) contacting a stable reporter cell line with a candidate modulator under conditions sufficient to permit activation of said conditionally active transactivation domain, the reporter cell line comprising:

a reporter gene operably linked to a recognition sequence for a sequence-specific DNA-binding protein; and

a stably integrated recombinant nucleic acid construct comprising a sequence encoding a fusion protein, said fusion protein comprising a sequence-specific DNA binding domain, wherein said DNA binding domain specifically binds said recognition sequence, and a conditionally active transactivation domain, wherein activation of said conditionally active transactivation domain is dependent on protein phosphorylation and/or protein:protein interaction, wherein binding of said fusion protein to said recognition sequence results in transactivation of said reporter gene when said transactivation domain fused to said DNA binding domain is activated; and

(b) detecting the expression of said reporter gene, wherein a difference in expression of said reporter gene in the presence of said candidate modulator and in the absence of said candidate modulator is indicative of modulatory activity of said candidate modulator on said conditionally active transactivating protein;

said kit comprising a cell line comprising a stably integrated recombinant nucleic acid construct comprising:

a reporter gene operably linked to a recognition sequence for a sequence-specific DNA-binding protein; and

a stably integrated recombinant nucleic acid construct comprising a sequence encoding a fusion protein, said fusion protein comprising a sequence-specific DNA binding domain, wherein said DNA binding domain specifically binds said recognition sequence, and a conditionally active transactivation domain, wherein activation of said conditionally active

